

### **REMARKS**

Claims 1-32 are all the claims presently pending in the application.

Allowable claim 2 has been amended merely to make minor editorial amendments and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 26-28 and 31 are allowed and claims 2-9 would be allowable if rewritten in independent form. However, Applicants respectfully submits that all of the claims are allowable for the reasons set forth below.

Claims 1, 10-25, 29, 30, and 32 stand rejected on prior art grounds under 35 U.S.C. § 102(b) as being anticipated by the Bringsjord article (Selmer Bringsjord, "Chess Is Too Easy", MIT'S Technology Review, Cambridge, March/April 1998).

These rejections are respectfully traversed in the following discussion.

#### **I. THE CLAIMED INVENTION**

Applicant's invention, as disclosed and claimed, is directed to a computer-implemented method (and system) of automatically generating a story.

In an illustrative, non-limiting embodiment of the invention, as defined by independent claim 1, a computer-implemented method of automatically generating a story includes selecting a theme of the story, examining elements of the theme and instantiating the theme, and using the

theme to select and control other aspects of the story generation, including a plot of the story which employs knowledge-generated characteristics, relationships, and events.

Other exemplary embodiments of the invention are somewhat similarly defined by independent claims 29, 30, and 32.

With such unique and unobvious features and aspects of the invention, story generation can take place automatically in which a plurality of artifacts are generated in a specified language which humans are likely to find interesting. Further, the story generation is provided by a creative agent which begins with a seed of interestingness and maintains that theme (e.g., anchors the theme) in the generation of skillful variations that are sufficiently distinct from the input.

Thus, the invention is a composite, theme-based story generation system and method. To provide the requisite interestingness, the invention provides a mathematization (e.g., formal representation) of the theme independent of plot, language, and story structure. The invention focuses on the theme (e.g., betrayal, the power of ambition to corrupt the soul, romantic love, etc.) as a critical aspect for providing "interestingness", and anchors the theme regardless of plot, characters, language, and story structure, etc.

By doing so, plot, setting, characters, story structure, language, etc. can be varied while keeping intact/constant the essential element (e.g., theme) which keeps the story interesting and while making the theme permeate the entire story. As such, the theme influences all of the other aspects and processes of the story generation such as setting, characters and their properties, language, story structure, selection of the words, sentences, and paragraphs used in the

generation of the language, plot, etc. and these other aspects can be varied while maintaining the theme which keeps the story interesting.

Hence, rather than anchor the story to characters or plot, etc., as in the conventional method/systems, the invention uses the theme and is captured independently to maintain a creative distance between the input and the output and to provide interestingness to the story.

Such features are not taught or suggested by any other prior art of record, either alone or in combination.

## **II. THE PRIOR ART REJECTION**

Claims 1, 10-25, 29, 30, and 32 stand rejected on prior art grounds under 35 U.S.C. § 102(b) as being anticipated by the Bringsjord article.

The Examiner alleges that Brutus. 1's System Architecture Diagram, at page 24 of the Bringsjord article, discloses "*selecting from a host of themes to support thematic concept instantiation*".

Applicants respectfully disagree with the Examiner's position for several reasons, and therefore, respectfully traverse this rejection.

Applicants submit that the Bringsjord article does not disclose or suggest how the machine is implemented, or for that matter, what the invention is or how the invention works.

Instead, the Bringsjord article is a cartoon that merely names some of the concepts which are also named in the invention. The Bringsjord article does not, however, disclose or suggest how each of these concepts work or how they are implemented in the invention. Thus, the

Bringsjord article clearly does not sufficiently enable the invention, but rather, merely provides a commentary on such a “concept”.

Indeed, the diagram in the Bringsjord article is nothing more than a cartoon or commentary on the “concept” of story generation, and only lists the generic names of such concepts without disclosing or suggesting any structure or implementation of these “concepts,” let alone a combination of structure or method operations which form the claimed invention.

As the Examiner well knows, to anticipate a claim the reference must teach or suggest each and every element of the claim in as complete detail as recited in the claims.

Although pictures and drawings *may* be sufficiently enabling to put the public in the possession of the article pictured, the picture or drawing must show all of the claimed structural features and how they are put together for one of ordinary skill in the art to make and use the invention in order to be sufficiently enabling (e.g., see M.P.E.P. § 2121.04; see also M.P.E.P. § 2125).

In this case, the Bringsjord article clearly does not disclose or suggest each and every element of the claims, in as complete and enabling detail as recited in the claims, let alone in a manner which would anticipate or render obvious (to the ordinarily skilled artisan). At best, the Bringsjord article merely lists some of the individual generic concepts without disclosing the implementation of these concepts or how these concepts interrelate (i.e., merely provides a “laundry list” of generic concepts).

Indeed, the Bringsjord article does not disclose or suggest all of the claimed structural features and how they are put together, and therefore, clearly is not sufficiently enabling to put the public in possession of the claimed invention.

Turning to the claim language, there is no teaching or suggestion of the novel and unobvious combination of features recited in independent claim 1 (or independent claims 29, 30, and 32 which recite somewhat similar features).

For example, independent claim 1 recites, *inter alia*, a computer-implemented method of automatically generating a story including:

selecting a theme of said story;  
examining elements of said theme and instantiating said theme;  
and  
using said theme to select and control other aspects of the story generation, including a plot of said story which employs knowledge-generated characteristics, relationships, and events  
(emphasis added).

As mentioned above, the Bringsjord article clearly does not disclose or suggest all of the claimed structural features and how they are put together. For example, the Bringsjord article clearly does not teach or suggest at least “using said theme to select and control other aspects of the story generation, including a plot of said story which employs knowledge-generated characteristics, relationships, and events” (emphasis added).

That is, neither the “cartoon” diagram of the Bringsjord article, nor the underlying text of the article, discloses or suggests at least “using said theme to select and control other aspects of the story generation” as claimed. Indeed, the diagram relied upon by the Examiner does not show or suggest any relationship (whether by the generic “cartoon” arrows or by any other means) between (for example) the thematic concept instantiation and the plot development shown in the “cartoon”. On the contrary, the “process level” of the “cartoon” diagram does not identify any relationship between these elements.

Thus, Applicants respectfully submit that the Bringsjord article clearly does not disclose or suggest all of the claimed structural features and how they are put together and clearly is not sufficiently enabling to put the public in possession of the claimed invention.

Therefore, the Bringsjord article clearly does not anticipate, or for that matter, render obvious the claimed invention recited in independent claim 1.

Similarly, Applicants submit that independent claims 29, 30, and 32 recite somewhat similar features as those recited in independent claim 1, which also are not disclosed or suggested by the Bringsjord article.

Thus, Applicants respectfully submit that independent claims 29, 30, and 32 also are not anticipated by, nor rendered obvious from, the Bringsjord article.

To summarize, the claimed invention requires that using the theme allows for selecting and controlling other aspects of the story generation, including a plot of the story which employs knowledge-generated characteristics, relationships, and events.

As mentioned in the application (e.g., see specification at pages 7-8), this allows for story generation to take place automatically in which a plurality of artifacts are generated. Thus, a composite, theme-based story generation system and method are provided. The invention focuses on the theme (e.g., betrayal, the power of ambition to corrupt the soul, romantic love, etc.) as a critical aspect for providing “interestingness”, and anchors the theme regardless of plot, characters, language, and story structure, etc.

By doing so, plot, setting, characters, story structure, and language, etc. can be varied while keeping intact/constant the essential element (e.g., the theme) which keeps the story interesting and while making the theme permeate the entire story. As such, the theme influences

all of the other aspects and processes of the story generation such as setting, characters and their properties, language, story structure, selection of the words, sentences, and paragraphs used in the generation of the language, plot, etc. and these other aspects can be varied while maintaining the theme which keeps the story interesting.

Thus, unlike the conventional systems and methods which anchor the story to characters or plot, etc., the present invention uses the theme and is captured independently to maintain a creative distance between the input and the output and to provide interestingness to the story.

In view of the foregoing, Applicants respectfully submit that claims 1, 10-25, 29, 30, and 32 are neither anticipated by or, for that matter, rendered obvious by the Bringsjord article.

Thus, the claimed invention clearly distinguishes over the Bringsjord article, either alone or in combination with any of the other prior art of record.

For all of the reasons stated above, the claimed invention is fully patentable over the cited references.

Further, the other prior art of record has been reviewed, but it too, even in combination with the Bringsjord article, fails to teach or suggest the claimed invention.

### **III. FORMAL MATTERS AND CONCLUSION**

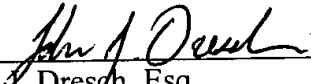
In view of the foregoing, Applicant submits that claims 1-32, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

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